#### PATENT APPLICATION

### THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q92374

Donald A. TOMALIA, et al.

Appln. No.: 10/689,503

Group Art Unit: 1714

Confirmation No.: 4273

Examiner: YOON, Tae H.

Filed: October 9, 2003

Petitions Attorney: Alesia M. Brown

For: NANOCOMPOSITES OF DENDRITIC POLYMERS

### RENEWED PETITION UNDER 37 C.F.R. § 1.137(b)

#### MAIL STOP PETITION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In response to the "Decision on Petition Under 37 C.F.R. § 1.137(b)" mailed April 27, 2006, which issued in response to Applicants' "Petition for Revival of an Application for Patent Abandoned Unintentionally Under 37 C.F.R. § 1.137(b)" filed March 10, 2006, Applicants submit herewith a copy of everything as filed on March 10, 2006, including a continuation application also filed on March 10, 2006; Petition for Revival of an Application for Patent Abandoned Unintentionally Under 37 C.F.R. § 1.137(b); Statement for Petition to Revive under 37 C.F.R. § 1.137(b); and Petition for Extension of Time Under 37 C.F.R. § 1.136. The copy of the continuation application includes copies of the Information Disclosure Statement, Preliminary Amendment, the Declaration, Drawings (16 pages), the Specification / Abstract (61 pages), and Claims (18/1).

\* RENEWED PETITION UNDER 37 C.F.R. § 1.137(b)

Appln. No.: 10/689,503

Further, Applicants also enclose a copy of the Decision on Petition, a copy of each of the Revocations of Power of Attorney and Appointment of New Attorneys By Assignee filed August 31, 2006 and a Petition for Extension of Time Under 37 C.F.R. § 1.136. The copy of each of the Powers of Attorney are submitted herewith to establish that the undersigned is authorized to sign this Renewed Petition under 37 C.F.R. § 1.137(b) and for the convenience of the Petitions Attorney. The Petition for Extension of Time Under 37 C.F.R. § 1.136 is submitted herewith to extend the due date for responding to the Decision to September 27, 2006, as permitted according to page 1 of the Decision.

Docket No: Q92374

As stated at page 1 of the Decision, the Petition filed March 10, 2006 has been deemed to satisfy requirements (2), (3) and (4) under 37 C.F.R. § 1.137(b), but not requirement (1) because "Petitioners have failed to submit a proper reply to the final Office action."

In view of the continuation application filed on March 10, 2006, requirement (1) under 37 C.F.R. § 1.137(b) is also satisfied, and reconsideration on the merits of the Petition filed March 10, 2006, is respectfully requested. *See*, MPEP § 711.03(c)(II)(A)(2)(b). The continuation application has received the serial number 11/384,910 and claims benefit of the present application (Application Ser. No. 10/689,503). A copy of the Request of Early Notification of Serial Number, as forwarded by the USPTO, is also enclosed herewith. Specifically, it is requested that the Petition be granted and the application be forwarded for examination.

As indicated at the bottom of page 2 of the Decision, it is believed that no additional petition fee is required. If necessary, however, the USPTO is directed and authorized to charge

RENEWED PETITION UNDER 37 C.F.R. § 1.137(b)

Appln. No.: 10/689,503

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all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

Ken Sakurabayash Registration No. 58,490

SUGHRUE MION, PLLC

Telephone: (202) 293-7060 Facsimile: (202) 293-7860

WASHINGTON OFFICE 23373
CUSTOMER NUMBER

Date: September 5, 2006

### PATENT APPLICATION

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q92374

Donald A. TOMALIA, et al.

Appln. No.: 10/689,503

Group Art Unit: 1714

Confirmation No.: 4273

Examiner: Yoon, Tae H.

Filed: October 9, 2003

For: NAN

NANOCOMPOSITES OF DENDRITIC POLYMERS

### REVOCATION OF POWER OF ATTORNEY AND APPOINTMENT OF NEW ATTORNEYS BY ASSIGNEE

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

SUMITOMO CHEMICAL COMPANY, LIMITED, states that it is the assignee of record of the entire right, title, and interest in the above-identified application by virtue of the assignments recorded in the U.S. Patent and Trademark Office at Reel 018040, Frame 0239, and hereby revokes all prior powers of attorney and authorizations of agent given in the above-identified application and appoints all attorneys of SUGHRUE MION, PLLC who are listed under the USPTO Customer Number provided below as its attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under this USPTO Customer Number may be changed from time to time at the sole discretion of Sughrue Mion, PLLC.

SUMITOMO CHEMICAL COMPANY, LIMITED requests all correspondence for the above-identified application be addressed to the address filed under the same USPTO Customer Number.

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

## REVOCATION OF POWER OF ATTORNEY AND APPOINTMENT OF NEW ATTORNEYS BY ASSIGNEE

Appln. No.: 10/689,503

Page 2

The undersigned is authorized to act on behalf of the assignee.

Respectfully submitted,
Satoshi KAWACHI

Typed or printed name

August 21, 2006

Date

- A

Representative Director

Title

Signature

# PATENT APPLICATION N THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: 60802D

TOMALIA, Donald A., et al.

Appln. No.: 10/689,503

Group Art Unit: 1714

Confirmation No.: 4273

Examiner: YOON, Tae H.

Filed: October 9, 2003

For: NANOCOMPOSITES OF DENDRITIC POLYMERS

PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. § 1.136

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.136, Applicant hereby petitions for an extension of time of three months, extending the time for responding to the Office Action of June 3, 2005 to December 3, 2005.

A check for the statutory fee of \$1020.00 is attached.

Respectfully submitted,

Susan Moeller Zerull Registration No. 38,367

Phone: (989) 636-8858

P.O. Box 1967 Midland, Michigan 48641-1967

Date:

14AR 1 0 2006



COMMISSIONER FOR PATENTS UNITED STATES PATENT AND TRADEMARK OFFICE P.O. BOX 1450 ALEXANDRIA, VA 22313-1450

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OFFICE OF PETITIONS

THE DOW CHEMICAL COMPANY INTELLECTUAL PROPERTY SECTION P. O. BOX 1967 MIDLAND, MI 48641-1967

In re Application of

Tomalia, et al.

Application No. 10/689,503

Filed: October 9, 2003 For: 60208D

: DECISION ON PETITION

This is a decision on the petition under 37 CFR 1.137(b), filed March 21, 2006, to revive the above-identified application.

The petition is DISMISSED.

Any request for reconsideration of this decision must be submitted within TWO (2) MONTHS from mail date of this decision. Extensions of time under 37 CFR 1.136(a) are permitted. The reconsideration request should include a cover letter entitled "Renewed Petition under 37 CFR 1.137(b)." This is not a final agency decision.

This application became abandoned September 4, 2005 for failure to timely reply to the final Office action mailed June 3, 2005. The final Office action month set a shortened statutory period of time for reply. No extensions of time in accordance with 37 CFR 1.136(a) were timely requested. Notice of Abandonment was mailed February 7, 2006.

A grantable petition pursuant to 37 C.F.R. § 1.137(b) must be accompanied by: (1) the required reply to the outstanding Office action or notice, unless previously filed; (2) the petition fee as set forth in 37 C.F.R. § 1.17(m); (3) a statement that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition pursuant to 37 C.F.R. § 1.137(b) was unintentional; and (4) any terminal disclaimer (and fee set forth in 37 C.F.R. § 1.20(d)) required pursuant to 37 C.F.R. § 1.137(c).

The instant petition lacks requirement (1) set forth above. Petitioners have failed to submit a proper reply to the final Office action.

Petitioners are advised that pursuant to 37 CFR 1.136, an extension of time must be filed prior to the expiration of the maximum period obtainable for reply to avoid abandonment. Therefore, no extension of time fee is due in connection with this petition. Petitioners may request a refund of the \$1,020.00 extension of time fee by writing to the Finance Office, Refund Section. A copy of this decision should accompany any request for refund.

Any renewed petition must include a proper reply to the outstanding Office action.

Further correspondence with respect to this matter should be addressed as follows:

By mail:

Mail Stop Petition

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

By facsimile:

(571) 273-8300

By hand delivery:

U.S. Patent and Trademark Office Customer Window, Mail Stop Petition

Randolph Building 401 Dulany Street Alexandria, VA 22314

Telephone inquiries concerning this matter may be directed to the undersigned at (571) 272-3205.

Alesia M. Brown

Petitions Attorney Office of Petitions



### PATENT APPLICATION

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: 60802D

TOMALIA, Donald A., et al.

Appln. No.: 10/689,503

Group Art Unit: 1714

Confirmation No.: 4273

Examiner: YOON, Tae H.

Filed: October 9, 2003

For:

NANOCOMPOSITES OF DENDRITIC POLYMERS

STATEMENT FOR PETITION TO REVIVE UNDER 37 C.F.R. § 1.137(b) AND PAYMENT OF FEE UNDER 37 C.F.R. § 1.17(m)

### MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Applicants hereby petition for revival of the above-identified application under 37 C.F.R. § 1.137(b) on the grounds that the application was unintentionally abandoned for failure to file a timely reply to the PTO Communication dated June 3, 2005. The undersigned states that the abandonment was unintentional, and also states that the delay in prosecution was unintentional.

The application was abandoned for failure to timely respond to the Office Action dated June 3, 2005.

Applicants respectfully submit that it was Applicants' intent to timely respond to the Office Action.

Further, Applicants submit herewith a PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. § 1.136, extending the due date for responding to the Office Action to December 3, 2005.

60802D

Application No. 10/689,503

Petition to Revive

Applicants respectfully submit that they have acted diligently to revive the application since discovering that no response had been filed with the Action dated June 3, 2005.

Therefore, Applicants did not delay filing the Petition to Revive under 37 C.F.R. § 1.137(b) at least because a PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. § 1.136 is submitted herewith, and they have acted diligently since discovering that no response had been filed in response to the Office Action dated June 3, 2005.

Submitted herewith in support of the Petition are the following documents:

- 1. Office Action dated June 3, 2005.
- 2. PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. § 1.136 and the check for the statutory fee of \$1020.00.
- 3. REPLY pursuant to MPEP § 711.03(c)(II)(A)(2)(b), including a continuation application of 10/689,503.

Respectfully submitted,

Susan Moeller Zerull

Registration No. 38,367

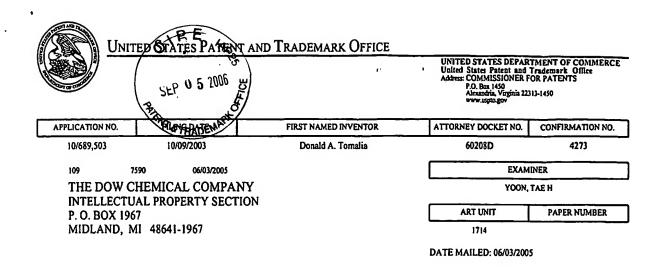
Phone: (989) 636-8858

P.O. Box 1967 Midland, Michigan 48641-1967

Date:

MAR 1 0 2006

				М	ODIFIED PTO/SB/64 (11-03)
PETITION FOR REV. ABANDONED UNINT	IVAL OF AN AP	PLICATION FOR PATENT UNDER 37 C.F.R. § 1.137(b	r )	Docket No.	60802D
First named inventor: TOMALIA,	Donald A.	5	Group Art Un	it: 1714	-
Application Number: 10/689,503	•	SER 0 5 2006 (1)	Examiner:	Гае H. YOON	
Filed: October 9, 2003		7006			
Title: NANOCOMPOSITES OF D	ENDRITIC POLY	MERS PADEMARK OF			
Attention: Office of Petitions MAIL STOP PETITION				***	
Commissioner for Patents					
P.O. Box 1450, Alexandria, VA 22313 FAX: (703) 872-9306	3-1450				
The above-identified application b	ecame abandoned	for failure to file a timely and	l proper reply to	a notice or act	ion by the United
States Patent and Trademark Office. To Office notice or action plus any extens	The date of abando	nment is the day after the exp	iration date of the	he period set for	r reply in the
APPLICANT HEREBY PETITION NOTE: A grantable petition required					
1. Petition fee					
		§ 1.17(m)). Applicant claim	s small entity st	atus. See 37 C.	F.R. § 1.27.
	ity - fee \$1500.00	(37 C.F.R. § 1.17(m)).			
Reply and/or fee     A. The reply and/or fee	to the above notes	d Office action in the form of			
A. The reply and/of fee		Office action in the form of			
	previously on .				
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B. The issue fee of \$					
☐ has been paid	previously on	•			
☐ is enclosed he	rewith.				
3. Terminal disclaimer with d ☑ Since this utility/pla		filed on or after June 8, 1995,	no terminal dis	alaimer is requi	irad
		fee (37 C.F.R. § 1.20(d)) of \$_			
than a small entity) of	lisclaiming the requ	uired period of time is enclos	ed herewith (see	PTO/SB/63).	for other
4. STATEMENT: [NOTE: T	he United States P	atent and Trademark Office r	nay require addi	itional informat	ion if there is a
question as to whether either	er the abandonment	t or the delay in filing a petiti	on under 37 C.F	.R. § 1.137(b)	was unintentional
(MPEP § 711.03(c), subsec		D))]. eply from the due date for the	required reply	until the filing	of a mandalla
petition under 37 C.I	F.R. § 1.137(b) was	s unintentional.	required repry	min me ming (	n a grantable
¹ See Attached Statem	ent.	0	•		
March 10, 7,006		Lusan Moelle	Zenl		
Date		Signature	( 2 )0 01 0		
(989) 636-8858		Susan Moeller	Zenill		38,367
Telephone	;	Typed or printed name		Reg.	
Enclosures:  Fee(s) Payment	•••				
☐ Reply (continuati ☐ Terminal Disclain					
Additional sheets		ents establishing unintentiona	l delav		
<u> </u>				·	



Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)	
	10/689,503	TOMALIA ET AL	
Office Action Summary	Examiner , ,	Art Unit	
	Tae H. Yoon	1714	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet v	vith the correspondence address	; <del></del>
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repli NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mallinearned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a ply within the statutory minimum of th will apply and will expire SIX (6) MO te, cause the application to become A	reply be timely filed  irty (30) days will be considered timely.  NTHS from the mailing date of this communi BANDONED (35 U.S.C. § 133).	ication.
Status			
1) Responsive to communication(s) filed on 21.	A <i>pril 2005</i> .		
2a)⊠ This action is FINAL. 2b)☐ Thi	is action is non-final.		
3) Since this application is in condition for allows closed in accordance with the practice under			its is
Disposition of Claims			
4) ⊠ Claim(s) 1-18 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1,4,5,8-12,15 and 18 is/are rejected. 7) ⊠ Claim(s) 2, 3, 6, 7, 13, 14, 16 and 17 is/are of 8) □ Claim(s) are subject to restriction and/	awn from consideration.  bjected to.		
Application Papers			
9) The specification is objected to by the Examin	er.		
10) The drawing(s) filed on is/are: a) ac	cepted or b) objected to	by the Examiner.	
Applicant may not request that any objection to the	e drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	•	• • •	• • •
Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Burea * See the attached detailed Office action for a list	nts have been received.  Its have been received in ority documents have bee au (PCT Rule 17.2(a)).	Application No n received in this National Stag	e
Attachment(s)	🗖		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ∐ Interview Paper No	Summary (PTO-413) o(s)/Mail Date	
Notice of Draitsperson's Patent Drawing Review (P10-948)   Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08   Paper No(s)/Mail Date	- CT	Informal Patent Application (PTO-152)	
S. Patent and Trademark Office			



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The priority data claimed by applicant are acknowledged, and thus the prior art having a filing date later than September 5, 2005 have been withdrawn.

Applicant's statement that "The Dow Corning Corporation" and "The Dow Chemical Company" are distinct and separate entity from each other has a merit and thus double patenting rejection is also withdrawn.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This is new matter rejection. The examiner could not find support for claim 18 at col. 8, lines 32-35 contrary to applicant's statement (The specification does not contain columns, but pages).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

<sup>(</sup>b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 5 and 8-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tomalia et al (US 5,338,532).

Rejection is maintained for reason of record and following response.

Dendrimers complexed with a metal inherently meet the recited solubility since the same dendrimers and metals are used by Tomalia et al and the invention. There are more than 30 metals are taught by Tomalia et al at col. 8, and thus choosing said metals would be an anticipation.

Claims 1, 8-12 and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Newkome et al (US 5,422,379).

Rejection is maintained for reason of record and following response.

Newkome et al do not have to teach the benefit that substantially insoluble metal compounds should be complexed with dendritic polymer that are soluble in the solvent as long as Newkome et al teach the instant dendrimers complexed with a metal since it is an inherent property.

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Claims 1, 8-12 and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0 684 044 A2.

EP teaches the instant metal-containing compound complexed with a dendrimer at page 4, lines 3 and 35-37 and page 5, lines 26-29. The use of fluorescent compounds is taught at page 5, lines 17-18 and page 11, line 15 wherein Na salt is seen. Said metal-containing compound complexed with a dendrimer would meet the recited solubility inherently given a particular solvent which is not required in the claim.

Claims 2, 3, 6, 7, 13, 14, 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tae H Yoon

Primary Examiner

Art Unit 1714

THY/May 31, 2005